

ABSTRACT

A material for a semiconductor-mounting heat dissipation substrate comprises a copper-molybdenum rolled composite obtained by impregnating melted copper into a void between powder particles of a molybdenum powder compact to obtain a composite of molybdenum and copper and then rolling the composite. In a final rolling direction of a plate material, the coefficient of linear expansion is $8.3 \times 10^{-6}/K$ at 30-800°C. The material for a semiconductor-mounting heat dissipation substrate is superior in thermal conductivity to a CMC clad material and easy in machining by a punch press. The substrate material is used as a heat dissipation substrate (13) of a ceramic package (11).

FOUO 222 12101